
DEPARTMENT OF THE ARMY 02552.TD
CORPS OF ENGINEERS, TULSA DISTRICT NOV 97

TULSA DISTRICT GUIDE SPECIFICATION

SECTION 02552

BITUMINOUS SURFACE COURSE (ODOT)

NOTE: This Guide is to be used generally for less
than 1000 Metric tons 1000 tons of surface course in
Oklahoma. For similar projects in Texas, use 02553.TD.
For larger projects and heavy duty pavements, use CEGS
02551.

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

OKLAHOMA DEPARTMENT OF TRANSPORTATION (ODOT)

ODOT Standard Specifications for Highway Construction (1996 - Metric)(1988
with 1991 Supplement - Inch-Pound)

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D 1188 (1996) Bulk Specific Gravity and Density of
Compacted Bituminous Mixtures Using Paraffin-
Coated Specimens

ASTM D 2726 (1996a) Bulk Specific Gravity and Density of
Compacted Bituminous Mixtures Using Saturated
Surface-Dry Specimens

ASTM D 2950 (1991) Density of Bituminous Concrete in
Place by Nuclear Method

1.2 SAMPLING AND TESTING

Sampling and testing shall be the responsibility of the Contractor. Sampling and testing shall be performed by an approved commercial testing laboratory or by the Contractor subject to approval. Unless otherwise specified, sampling and testing shall be in accordance with ODOT Specifications for bituminous material. Copies of test results shall be furnished to the Contracting Officer. Approval of a source does not relieve the Contractor of responsibility for delivery at the job site of materials meeting the requirements herein. Required tests and test frequencies of test standards shall be as follows:

1.2.1 Hot bin gradations (cold-feed gradation when drum mix plant is used):

One test per 400 metric tons 400 tons of mix or fraction thereof.

1.2.2 Hveem Specimens

Two sets (three specimens per set) per day and/or at least one set per each 400 metric tons 400 tons of mix placed.

1.2.3 Asphalt Extraction

One test per 400 metric tons 400 tons of mix (at least one per day).

1.2.4 Field and Lab Density Tests

One lab density set per 400 metric tons 400 tons of mix or fraction thereof (three specimens per set). One field density set every 250 square meters 2500 square feet or fraction thereof (three specimens per set). Field density of compacted bituminous pavement shall be determined by ASTM D 2950, ASTM D 1188, or ASTM D 2726. If ASTM D 2950 is used, field density shall be checked by ASTM D 1188 or ASTM D 2726 once per 8 ASTM D 2950 tests.

1.2.5 Thickness Measurements

One measurement for each 850 square meters 1000 square yards.

1.3 ACCESS TO PLANT AND EQUIPMENT

The Contracting Officer shall have access at all times to all parts of the paving plant for checking adequacy of the equipment in use, inspecting operation of the plant, verifying weights, proportions, and character of materials, and checking temperatures maintained in preparation of the mixtures.

PART 2 PRODUCTS

2.1 HOT-MIX SURFACE COURSE

Bituminous hot-mix surface course shall conform to the requirements of the ODOT Standard Specifications for Highway Construction for Plant Mix Asphalt Concrete Pavement Section 411 and 411A except as specified hereinafter.

2.1.1 Asphalt Material

Asphalt material for the surface course shall be asphalt cement, Type AC-20, conforming to ODOT Standard Specifications for "Asphalt Materials", Section 708.03. Asphalt material shall come from a source approved for use by the Oklahoma Department of Transportation. The seal number from the tank and the number of the Oklahoma Department of Transportation's Laboratory test report shall be furnished to the Contracting Officer.

2.1.2 Paving Mixture Type

Paving mixture shall be Type "B".

2.1.3 Modifications to ODOT Standard Specifications

ODOT Specifications shall be modified as follows:

(a) Mat and joint density shall be 94-98 percent of maximum theoretical specific gravity. The Hveem stability shall be 35 minimum.

(b) The measurement and payment paragraphs shall not apply

2.2 PROPORTIONING OF MIXTURE

2.2.1 Job Mix Formula(JMF)

The job mix formula shall be developed and submitted for approval. Tolerances in Table 5 of the [ODOT Standard Specifications](#) Section 708.05 shall apply to the job mix formula.

PART 3 EXECUTION

3.1 CONSTRUCTION

Bituminous surface course shall be constructed in accordance with the procedures in [ODOT Standard Specifications](#) Section 411 and 411A.